



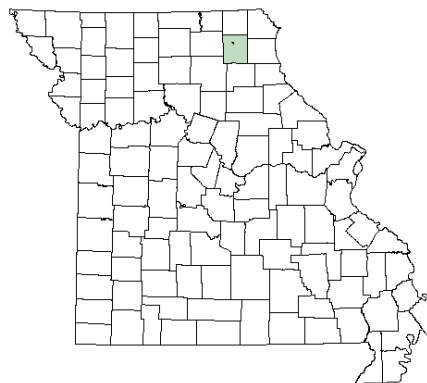
Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Edina Lake

Waterbody Segment at a Glance:

County: Knox
Nearby Cities: Edina
Area of impairment: 51 Acres
Pollutant: Atrazine
Source: Corn, Sorghum Production



Proposed for addition to 2002 303(d) List

TMDL Priority Ranking: Not assigned

State map showing location of watershed

Description of the Problem

Beneficial uses of Edina Lake:

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health [associated with] Fish Consumption
- Boating and Canoeing
- Drinking Water Supply

Use that is impaired

Drinking Water Supply

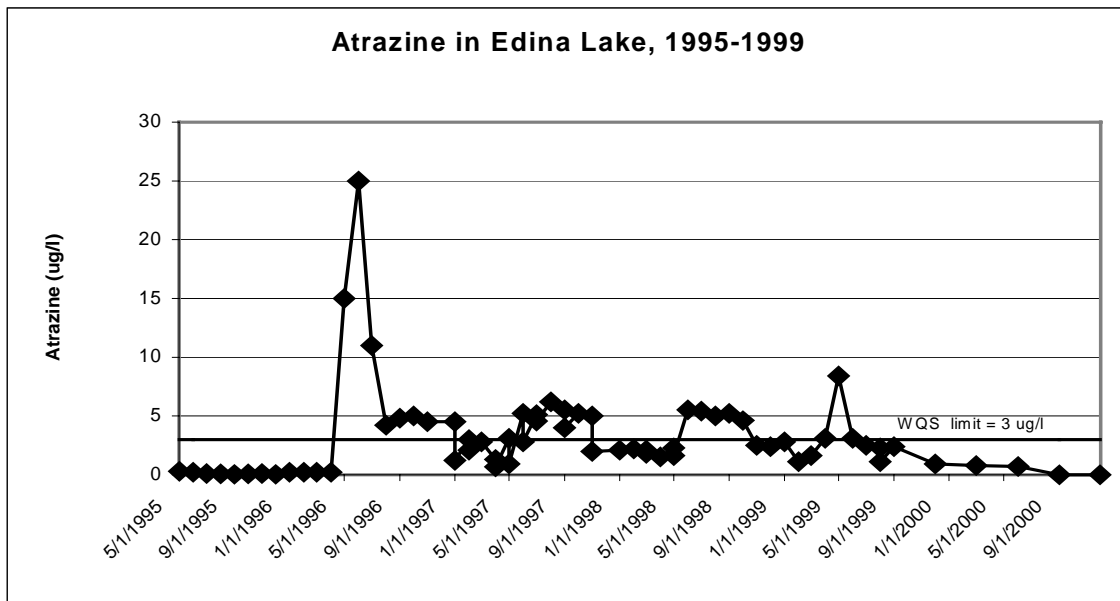
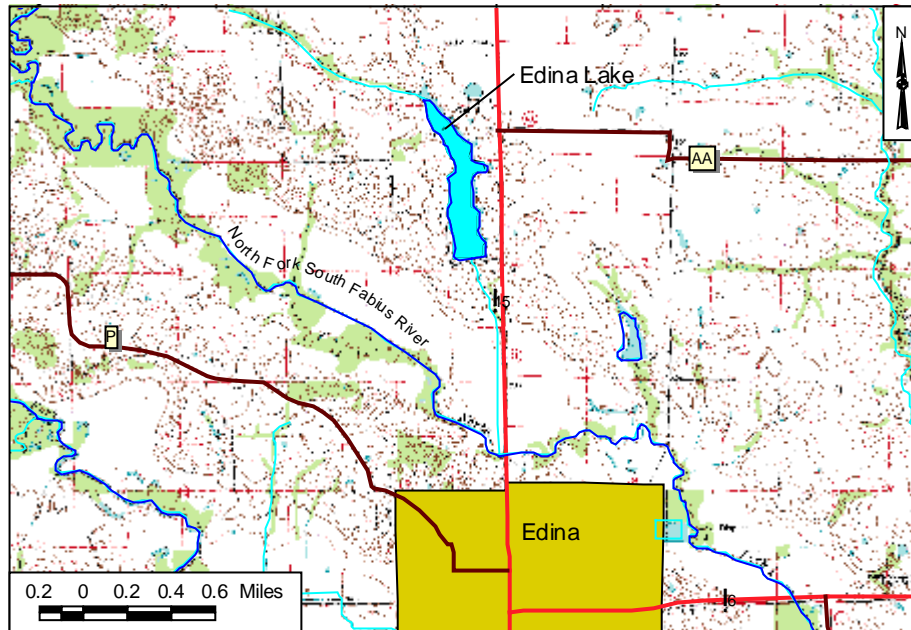
Standards that apply

- The impairment of this lake is based on exceedence of the specific criterion of 3 micrograms per liter ($\mu\text{g/L}$) atrazine, as an average of the period of record, contained in Missouri's Water Quality Standards 10 CSR 20-7.031, Table A.

The Edina Reservoir is 51 acres in size and is the sole public water supply source for about 1,300 people in Edina and 3,000 people served by Knox County Public Water Supply District No.1. Runoff from corn and sorghum production areas in the watershed has resulted in measurable amounts of atrazine being detected within the lake.

Atrazine is a widely used herbicide for control of broadleaf weeds. It is the most heavily used herbicide used on corn and grain sorghum in Missouri. Atrazine is considered a possible human carcinogen, so the state standard for allowable amounts in drinking water supply source waters is set at the very low level of 3 $\mu\text{g/L}$ or parts per billion. Missouri Department of Natural Resources and Novartis Inc. have taken 71 measurements of atrazine in the lake since 1995. The average atrazine concentration in the lake based on these 71 measurements is 3.04 $\mu\text{g/L}$. The long term average atrazine level in finished drinking water for the city of Edina is 1.02 $\mu\text{g/L}$. Based on the raw water long-term average atrazine level, this lake is proposed for addition to the 303(d) list. Herbicide monitoring of the lake will continue. Data and a map of the area follow.

Map of Edina Lake and Surrounding Area



Sources: Missouri Dept of Natural Resources and Novartis Inc.

For more information call or write:

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